

William L. Sanders on value-added methodology and the Tennessee Value-Added Accountability System

Influence Index: 29

Selected Citations

- Sanders, W. L., & Horn, S. P. (1994). The Tennessee Value-Added Assessment System (TVAAS): Mixed-model methodology in educational assessment. *Journal of Personnel Evaluation in Education*, 8, 299-311.
- Sanders, W. L., & Horn, S. P. (1998). Research findings from the Tennessee Value-Added Assessment System (TVAAS) database: Implications for educational evaluation and research. *Journal of Personnel Evaluation in Education*, 12(3), 247-256.
- Sanders, W.L., & Rivers, J.C. (1996). Cumulative and residual effects of teachers on future student academic achievement. Knoxville, TN: University of Tennessee Value-Added Research and Assessment Center.
- Sanders, W.L., Saxton, A.M., & Horn, S.P. (1997). The Tennessee Value-Added Accountability System: A quantitative, outcomes-based approach to educational assessment. In J. Millman (Ed.), *Grading teachers, grading schools: Is student achievement a valid evaluation measure?* (pp. 137-162). Thousand Oaks, CA: Corwin Press.

Description

Developed by William L. Sanders, the statistical methodology and accompanying framework known as the Tennessee Value-added Assessment System (TVAAS) introduced a new paradigm for measuring student academic progress based upon the contribution (or value-added) of individual teachers to student gain scores. One critical ingredient of this work has been data capable of tracking the achievement growth of individual students over time. Over the years, the TVAAS has frequently been cited as a model for other states attempting to develop their own student data systems.

Beginning in the early 1980's Sanders developed and tested his methods and theories in the state of Tennessee, where they became increasingly influential over the decades as the movement for accountability took root and flourished, persisting to this day. Utilizing a "mixed-model" statistical methodology, Sanders' approach is able to isolate particular factors that contribute to the trajectory of an individual student's academic performance. For example, a school district using Sanders's software can compare each student's present performance to past performance and calculate a gain score that takes into account the impact of a particular teacher. This information, in turn, can provide an indication of the effectiveness of individual teachers based on their students' performance trends.

Research by Sanders has garnered considerable national attention as a model for sophisticated policy- and practice-relevant analysis. Among other issues, his work has examined the effect of a succession of poor teachers upon the performance of an individual student as well as the deleterious impact of placing disproportionate emphasis upon the achievement of one particular group of students as opposed to another.

Sanders' work on value-added assessment has been published in such academic journals as the *Journal of Personnel Evaluation in Education*, *School Administrator*, and *School Effectiveness and School Improvement* and presented at numerous conferences and meetings. In 2006, Sanders provided testimony at the U.S. House of Representatives Committee on Education and the Workforce's hearing on growth models and educational improvement. Previously a math professor and director of the Value-Added Research and Assessment Center at the University of Tennessee, Sanders now heads the SAS inSchool program at the SAS Institute in Cary, North Carolina.

For More Information

Research on value-added methods can be found online at www.sas.com/govedu/edu/research.html.